

Frequency Mixer

MCA-ED12784/1

Typical Performance Data

RF (IN) (MHz)	LO (MHz)	CONVERSION LOSS IF FIXED @IF(OUT)=270MHz (dB)		
		@LO (dBm)		
		+13	+16	+19
1710.0	1440.0	10.95	9.96	9.20
1750.0	1480.0	10.65	9.67	8.91
1790.0	1520.0	9.77	8.84	8.26
1830.0	1560.0	9.17	8.52	8.16
1870.0	1600.0	8.99	8.61	8.39
1910.0	1640.0	9.04	8.58	8.36
1950.0	1680.0	8.66	8.26	8.10
1990.0	1720.0	8.53	8.26	8.17
2030.0	1760.0	8.34	8.13	8.07
2070.0	1800.0	8.14	7.98	7.98
2110.0	1840.0	8.05	7.86	7.81
2150.0	1880.0	7.74	7.58	7.54
2190.0	1920.0	7.67	7.56	7.58
2230.0	1960.0	7.54	7.45	7.48
2270.0	2000.0	7.61	7.55	7.60
2310.0	2040.0	7.74	7.61	7.59
2350.0	2080.0	7.76	7.61	7.58
2390.0	2120.0	7.98	7.74	7.62
2430.0	2160.0	7.98	7.69	7.56
2470.0	2200.0	8.19	7.86	7.70
2510.0	2240.0	8.34	7.94	7.74
2550.0	2280.0	8.46	8.05	7.84
2590.0	2320.0	8.82	8.27	7.95
2630.0	2360.0	8.79	8.20	7.90
2670.0	2400.0	9.20	8.51	8.13
2710.0	2440.0	9.45	8.76	8.41
2750.0	2480.0	9.60	8.82	8.42
2790.0	2520.0	9.72	8.88	8.35
2830.0	2560.0	9.67	8.86	8.36
2870.0	2600.0	9.92	9.05	8.44
2910.0	2640.0	9.88	9.08	8.52
2950.0	2680.0	10.09	9.26	8.70
2990.0	2720.0	10.17	9.32	8.78
3035.0	2765.0	10.21	9.43	8.93
3075.0	2805.0	10.38	9.49	8.98
3120.0	2850.0	10.56	9.65	9.12
3160.0	2890.0	10.94	9.81	9.16
3205.0	2935.0	10.97	9.91	9.31
3245.0	2975.0	11.19	10.03	9.39
3290.0	3020.0	11.18	10.28	9.66

RF (IN) (MHz)	LO (MHz)	IP3 INPUT (dBm)		
		@LO (dBm)		
		+13	+16	+19
1710.0	1440.0	30.92	25.94	25.35
1750.0	1480.0	25.63	28.02	29.21
1790.0	1520.0	26.77	26.10	27.94
1830.0	1560.0	23.16	23.12	23.69
1870.0	1600.0	21.64	24.58	27.05
1910.0	1640.0	23.39	26.23	28.90
1950.0	1680.0	25.20	27.48	32.08
1990.0	1720.0	25.26	29.47	32.81
2030.0	1760.0	26.04	30.99	33.20
2070.0	1800.0	26.78	30.64	33.90
2110.0	1840.0	28.38	31.45	34.25
2150.0	1880.0	28.98	31.28	33.13
2190.0	1920.0	29.37	33.10	34.31
2230.0	1960.0	28.02	32.88	37.14
2270.0	2000.0	27.37	30.45	36.54
2310.0	2040.0	26.95	29.42	33.29
2350.0	2080.0	26.54	28.89	32.47
2390.0	2120.0	25.98	27.94	30.98
2430.0	2160.0	26.55	28.19	31.47
2470.0	2200.0	26.91	28.94	32.03
2510.0	2240.0	26.37	27.84	30.35
2550.0	2280.0	25.86	27.28	29.85
2590.0	2320.0	26.41	27.52	29.02
2630.0	2360.0	26.46	27.95	29.62
2670.0	2400.0	25.32	27.10	29.12
2710.0	2440.0	25.57	26.41	29.13
2750.0	2480.0	25.51	26.43	29.65
2790.0	2520.0	25.71	25.72	28.68
2830.0	2560.0	24.90	26.06	29.44
2870.0	2600.0	24.85	25.34	28.48
2910.0	2640.0	24.75	26.10	29.37
2950.0	2680.0	25.15	26.11	28.90
2990.0	2720.0	25.71	26.60	28.97
3035.0	2765.0	28.17	28.24	30.20
3075.0	2805.0	30.78	28.46	30.27
3120.0	2850.0	25.71	26.61	29.20
3160.0	2890.0	24.61	24.56	27.57
3205.0	2935.0	23.85	25.26	28.52
3245.0	2975.0	24.06	24.86	27.61
3290.0	3020.0	24.80	26.52	29.26

RF (IN) (MHz)	LO (MHz)	COMPRESSION @RF IN=+20dBm (dB)		
		@LO (dBm)		
		+13	+16	+19
1710.0	1440.0	1.39	0.95	0.80
1750.0	1480.0	1.42	1.17	0.97
1790.0	1520.0	1.93	1.55	1.23
1830.0	1560.0	1.96	1.57	1.11
1870.0	1600.0	1.94	1.29	0.96
1910.0	1640.0	1.55	1.13	0.86
1950.0	1680.0	1.53	1.07	0.72
1990.0	1720.0	1.47	0.91	0.52
2030.0	1760.0	1.36	0.81	0.41
2070.0	1800.0	1.35	0.82	0.42
2110.0	1840.0	1.17	0.70	0.37
2150.0	1880.0	1.18	0.72	0.40
2190.0	1920.0	1.17	0.65	0.31
2230.0	1960.0	1.36	0.72	0.30
2270.0	2000.0	1.30	0.65	0.29
2310.0	2040.0	1.48	0.70	0.33
2350.0	2080.0	1.58	0.73	0.34
2390.0	2120.0	1.76	0.81	0.37
2430.0	2160.0	2.04	1.00	0.47
2470.0	2200.0	2.06	1.10	0.52
2510.0	2240.0	2.43	1.42	0.72
2550.0	2280.0	2.34	1.37	0.67
2590.0	2320.0	2.68	1.67	0.84
2630.0	2360.0	2.58	1.52	0.79
2670.0	2400.0	2.78	1.83	1.12
2710.0	2440.0	2.64	1.68	1.07
2750.0	2480.0	2.51	1.63	1.09
2790.0	2520.0	2.79	1.88	1.18
2830.0	2560.0	2.68	1.76	1.09
2870.0	2600.0	3.08	2.13	1.31
2910.0	2640.0	2.92	1.99	1.13
2950.0	2680.0	3.12	2.11	1.18
2990.0	2720.0	2.86	1.88	0.98
3035.0	2765.0	2.88	1.92	0.97
3075.0	2805.0	2.92	1.87	1.03
3120.0	2850.0	2.46	1.57	0.99
3160.0	2890.0	2.44	1.80	1.28
3205.0	2935.0	1.86	1.42	0.99
3245.0	2975.0	2.28	1.72	1.22
3290.0	3020.0	1.69	1.20	0.69

Typical Performance Data

IF (OUT) (MHz)	LO (MHz)	CONVERSION LOSS VS. IF FREQUENCY @RF(IN)=2140MHz (dB)
		@LO (dBm) +16
690.0	1450.0	10.22
648.4	1491.6	9.64
606.7	1533.3	9.02
565.1	1574.9	8.56
537.3	1602.7	8.63
495.7	1644.3	8.51
468.0	1672.0	8.42
426.3	1713.7	8.26
398.6	1741.4	8.18
356.9	1783.1	8.02
329.2	1810.8	7.92
287.6	1852.4	7.76
259.8	1880.2	7.65
218.2	1921.8	7.50
190.4	1949.6	7.44
148.8	1991.2	7.35
121.0	2019.0	7.29
79.4	2060.6	7.26
51.6	2088.4	7.25
10.0	2130.0	7.54
36.5	2176.5	7.35
116.1	2256.1	7.59
169.2	2309.2	7.80
248.8	2388.8	8.11
301.8	2441.8	8.78
381.4	2521.4	9.12
434.5	2574.5	9.22
514.1	2654.1	9.46
567.1	2707.1	9.81
646.7	2786.7	9.87
699.8	2839.8	9.74
779.4	2919.4	9.82
832.4	2972.4	9.89
912.0	3052.0	9.58
965.1	3105.1	9.50
1044.7	3184.7	9.82
1097.8	3237.8	9.68
1177.3	3317.3	9.73
1230.4	3370.4	10.10
1310.0	3450.0	10.25

IF (OUT) (MHz)	LO (MHz)	CONVERSION LOSS VS. IF FREQUENCY @RF(IN)=2059.89MHz (dB)
		@LO (dBm) +16
10.1	2070.0	7.39
50.7	2110.6	7.21
91.4	2151.3	7.34
132.0	2191.9	7.46
172.6	2232.5	7.67
213.3	2273.2	7.75
253.9	2313.8	8.01
294.5	2354.4	8.13
335.2	2395.1	8.47
375.8	2435.7	8.96
416.4	2476.3	9.10
436.8	2496.7	9.33
477.4	2537.3	9.49
497.7	2557.6	9.43
538.4	2598.3	9.59
558.7	2618.6	9.68
599.3	2659.2	9.63
619.6	2679.5	9.79
660.3	2720.2	9.90
680.6	2740.5	9.79
721.2	2781.1	9.84
741.5	2801.4	9.89
782.2	2842.1	9.76
802.5	2862.4	9.76
843.1	2903.0	9.93
863.4	2923.3	9.79
904.1	2964.0	9.84
924.4	2984.3	9.87
965.0	3024.9	9.60
985.3	3045.2	9.56
1026.0	3085.9	9.52
1046.3	3106.2	9.38
1086.9	3146.8	9.39
1107.2	3167.1	9.65
1147.9	3207.8	9.68
1168.2	3228.1	9.62
1208.8	3268.7	9.79
1229.1	3289.0	9.76
1269.8	3329.7	9.82
1290.1	3350.0	10.05

IF (OUT) (MHz)	LO (MHz)	CONVERSION LOSS VS. IF FREQUENCY @RF(IN)=2220.1MHz (dB)
		@LO (dBm) +16
770.1	1450.0	10.28
750.6	1469.5	10.12
731.1	1489.0	9.81
711.6	1508.5	9.50
692.2	1527.9	9.34
672.7	1547.4	8.89
653.2	1566.9	8.69
633.7	1586.4	8.73
614.2	1605.9	8.78
594.7	1625.4	8.73
575.2	1644.9	8.57
555.7	1664.4	8.49
536.3	1683.8	8.40
516.8	1703.3	8.33
497.3	1722.8	8.26
477.8	1742.3	8.15
458.3	1761.8	8.10
438.8	1781.3	8.05
419.3	1800.8	7.87
399.8	1820.3	7.86
380.4	1839.7	7.76
360.9	1859.2	7.67
341.4	1878.7	7.62
321.9	1898.2	7.51
302.4	1917.7	7.50
282.9	1937.2	7.51
263.4	1956.7	7.46
243.9	1976.2	7.49
224.5	1995.6	7.45
205.0	2015.1	7.40
185.5	2034.6	7.46
166.0	2054.1	7.38
146.5	2073.6	7.43
127.0	2093.1	7.37
107.5	2112.6	7.38
88.0	2132.1	7.42
68.6	2151.5	7.37
49.1	2171.0	7.37
29.6	2190.5	7.37
10.1	2210.0	7.69

Frequency Mixer

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Typical Performance Data

LO (MHz)	LO-RF ISOLATION (dB)			LO-IF ISOLATION (dB)		
	@LO (dBm)			@LO (dBm)		
	+13	+16	+19	+13	+16	+19
1440.0	24.88	24.40	23.86	28.58	29.91	30.57
1480.0	26.38	27.03	27.40	34.51	36.68	38.55
1520.0	28.15	29.11	29.93	41.47	40.46	39.24
1560.0	30.29	31.12	31.61	38.80	38.81	38.32
1600.0	31.15	31.66	32.07	35.78	37.97	40.09
1640.0	32.24	32.72	33.14	32.68	34.39	36.08
1680.0	33.74	34.31	34.68	29.58	30.68	31.68
1720.0	34.41	35.14	35.45	27.48	28.40	29.35
1760.0	35.61	36.37	36.56	26.24	27.09	27.81
1800.0	35.42	36.28	36.52	24.96	25.58	26.13
1840.0	34.91	35.62	35.83	24.42	24.98	25.38
1880.0	34.15	34.83	35.07	23.78	24.37	24.76
1920.0	33.86	34.38	34.44	23.38	23.94	24.34
1960.0	34.84	35.48	35.54	22.77	23.34	23.79
2000.0	35.09	35.57	35.70	22.04	22.40	22.86
2040.0	35.16	35.69	35.90	21.56	21.79	22.26
2080.0	36.07	36.67	36.70	21.26	21.60	22.04
2120.0	35.93	36.57	36.68	21.40	21.83	22.40
2160.0	36.43	37.17	37.12	21.91	22.44	23.05
2200.0	35.89	36.59	36.54	22.62	23.18	23.69
2240.0	35.96	36.77	36.53	23.28	23.95	24.35
2280.0	36.01	36.66	36.36	23.78	24.50	24.92
2320.0	35.75	36.60	36.28	23.97	24.81	25.24
2360.0	37.27	37.63	37.24	24.61	25.20	25.71
2400.0	42.11	40.93	38.57	25.07	25.69	26.13
2440.0	39.80	35.41	33.48	26.79	27.03	26.94
2480.0	36.65	35.34	34.89	27.08	26.98	26.71
2520.0	37.28	36.85	36.50	27.32	27.13	26.63
2560.0	37.59	37.33	36.99	27.65	27.25	26.62
2600.0	37.09	37.09	36.67	27.67	27.23	26.49
2640.0	37.14	37.32	36.94	27.53	27.13	26.48
2680.0	37.51	37.84	37.41	27.88	27.48	26.91
2720.0	37.90	38.02	37.46	28.34	28.00	27.40
2765.0	38.03	38.32	38.03	28.67	28.28	27.75
2805.0	39.00	39.45	39.79	28.79	28.13	27.76
2850.0	40.33	41.29	41.56	28.36	27.62	27.49
2890.0	43.43	43.77	42.59	28.25	27.65	27.52
2935.0	43.38	42.63	42.07	28.59	28.03	28.06
2975.0	45.52	45.71	45.48	28.93	28.25	28.16
3020.0	47.78	48.07	46.05	28.34	28.02	27.59

RF (IN) (MHz)	LO (MHz)	RF-IF ISOLATION (dB)		
		@LO (dBm)		
		+13	+16	+19
1710.0	1440.0	25.19	27.51	30.09
1750.0	1480.0	22.72	23.85	25.15
1790.0	1520.0	23.85	24.82	25.57
1830.0	1560.0	25.92	26.95	27.51
1870.0	1600.0	27.45	28.60	29.77
1910.0	1640.0	27.75	29.40	30.79
1950.0	1680.0	28.96	30.19	30.85
1990.0	1720.0	30.75	31.65	32.26
2030.0	1760.0	33.61	35.04	35.70
2070.0	1800.0	39.75	43.29	45.67
2110.0	1840.0	58.52	49.66	45.90
2150.0	1880.0	43.10	41.09	40.39
2190.0	1920.0	38.16	38.09	38.67
2230.0	1960.0	34.99	35.89	37.25
2270.0	2000.0	33.13	34.27	36.25
2310.0	2040.0	31.05	31.83	33.26
2350.0	2080.0	29.43	29.93	30.90
2390.0	2120.0	27.59	28.21	29.06
2430.0	2160.0	25.89	26.49	27.38
2470.0	2200.0	24.65	25.16	26.03
2510.0	2240.0	23.82	24.31	25.32
2550.0	2280.0	23.05	23.55	24.53
2590.0	2320.0	22.62	22.94	23.74
2630.0	2360.0	21.90	22.11	22.71
2670.0	2400.0	21.10	21.12	21.46
2710.0	2440.0	20.51	20.39	20.74
2750.0	2480.0	21.22	21.22	21.59
2790.0	2520.0	21.90	21.88	22.09
2830.0	2560.0	21.83	21.59	21.53
2870.0	2600.0	21.66	21.27	20.98
2910.0	2640.0	21.54	21.00	20.55
2950.0	2680.0	21.81	21.05	20.33
2990.0	2720.0	22.01	21.31	20.61
3035.0	2765.0	22.64	21.86	21.11
3075.0	2805.0	23.19	22.32	21.63
3120.0	2850.0	23.72	22.85	22.31
3160.0	2890.0	24.06	23.25	22.63
3205.0	2935.0	23.25	22.58	22.05
3245.0	2975.0	22.15	21.66	21.19
3290.0	3020.0	20.58	20.26	19.89

Frequency Mixer

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Typical Performance Data

RF (IN) (MHz)	LO (MHz)	RF VSWR (:1)			LO (MHz)	LO VSWR (:1)			IF (OUT) (MHz)	IF VSWR @LO=1910MHz (:1)		
		@LO (dBm)				@LO (dBm)				@LO (dBm)		
		+13	+16	+19		+13	+16	+19		+13	+16	+19
1710.0	1440.0	2.86	2.48	2.22	1440.0	10.02	9.85	9.69	10.0	1.58	1.82	2.07
1750.0	1480.0	2.78	2.46	2.24	1480.0	11.09	11.24	11.17	50.4	1.57	1.81	2.06
1790.0	1520.0	2.64	2.35	2.17	1520.0	12.89	12.71	12.26	90.9	1.58	1.81	2.04
1830.0	1560.0	2.41	2.17	1.99	1560.0	12.61	12.18	11.61	131.3	1.57	1.78	2.00
1870.0	1600.0	2.18	1.85	1.61	1600.0	11.61	11.38	11.09	171.7	1.59	1.77	1.96
1910.0	1640.0	1.98	1.68	1.51	1640.0	11.09	11.03	10.89	212.2	1.60	1.75	1.92
1950.0	1680.0	1.81	1.57	1.44	1680.0	9.96	9.79	9.48	252.6	1.62	1.72	1.86
1990.0	1720.0	1.70	1.50	1.39	1720.0	8.64	8.47	8.23	293.0	1.67	1.75	1.86
2030.0	1760.0	1.59	1.42	1.33	1760.0	7.08	6.91	6.71	333.4	1.70	1.72	1.80
2070.0	1800.0	1.52	1.36	1.29	1800.0	5.81	5.68	5.54	373.9	1.79	1.78	1.83
2110.0	1840.0	1.46	1.33	1.27	1840.0	4.80	4.74	4.68	414.3	1.81	1.77	1.79
2150.0	1880.0	1.43	1.30	1.24	1880.0	4.16	4.13	4.12	474.9	1.98	1.89	1.86
2190.0	1920.0	1.40	1.28	1.23	1920.0	3.88	3.92	3.96	515.4	2.02	1.91	1.87
2230.0	1960.0	1.41	1.29	1.24	1960.0	3.95	4.01	4.06	576.0	2.07	1.93	1.85
2270.0	2000.0	1.37	1.26	1.22	2000.0	4.45	4.56	4.69	616.5	2.14	1.97	1.85
2310.0	2040.0	1.38	1.27	1.23	2040.0	5.06	5.17	5.27	677.1	2.17	1.97	1.83
2350.0	2080.0	1.36	1.25	1.22	2080.0	5.85	6.05	6.24	717.5	2.17	1.97	1.81
2390.0	2120.0	1.38	1.26	1.24	2120.0	6.66	6.83	6.91	778.2	2.17	1.96	1.78
2430.0	2160.0	1.38	1.27	1.24	2160.0	7.56	7.80	7.97	818.6	2.25	2.04	1.86
2470.0	2200.0	1.36	1.25	1.23	2200.0	8.47	8.64	8.64	879.2	2.22	2.01	1.84
2510.0	2240.0	1.36	1.24	1.23	2240.0	9.28	9.48	9.48	919.7	2.12	1.94	1.78
2550.0	2280.0	1.35	1.23	1.20	2280.0	10.19	10.50	10.56	980.3	2.00	1.81	1.65
2590.0	2320.0	1.42	1.28	1.22	2320.0	10.62	10.69	10.43	1020.8	1.87	1.69	1.55
2630.0	2360.0	1.44	1.30	1.25	2360.0	11.17	11.31	11.31	1081.4	1.80	1.63	1.49
2670.0	2400.0	1.46	1.31	1.25	2400.0	10.75	10.62	10.13	1121.8	1.71	1.56	1.42
2710.0	2440.0	1.42	1.30	1.30	2440.0	11.53	11.61	11.38	1182.5	1.63	1.48	1.35
2750.0	2480.0	1.45	1.33	1.31	2480.0	12.99	12.99	12.80	1222.9	1.49	1.36	1.25
2790.0	2520.0	1.52	1.39	1.36	2520.0	13.49	13.29	12.44	1283.5	1.41	1.30	1.21
2830.0	2560.0	1.57	1.46	1.42	2560.0	13.92	13.92	13.81	1324.0	1.37	1.28	1.22
2870.0	2600.0	1.64	1.52	1.47	2600.0	13.60	13.09	12.09	1384.6	1.42	1.40	1.39
2910.0	2640.0	1.69	1.59	1.56	2640.0	13.70	13.49	13.09	1425.1	1.45	1.46	1.48
2950.0	2680.0	1.75	1.66	1.62	2680.0	13.70	13.29	12.61	1485.7	1.69	1.73	1.77
2990.0	2720.0	1.82	1.73	1.70	2720.0	14.03	13.60	12.80	1526.1	1.95	1.99	2.04
3035.0	2765.0	1.89	1.81	1.77	2765.0	13.81	13.60	13.19	1586.8	2.33	2.41	2.49
3075.0	2805.0	1.95	1.87	1.83	2805.0	13.49	13.09	12.26	1627.2	2.57	2.68	2.78
3120.0	2850.0	2.08	2.00	1.97	2850.0	13.81	13.60	13.39	1687.8	2.94	3.12	3.29
3160.0	2890.0	2.22	2.12	2.08	2890.0	13.49	12.99	12.09	1728.3	3.15	3.39	3.63
3205.0	2935.0	2.40	2.31	2.30	2935.0	14.03	13.81	13.49	1788.9	3.26	3.53	3.83
3245.0	2975.0	2.65	2.53	2.50	2975.0	13.60	12.99	12.18	1829.4	3.23	3.48	3.76
3290.0	3020.0	2.86	2.78	2.75	3020.0	13.92	13.60	13.19	1890.0	3.02	3.18	3.38

Harmonics Tables

RF HARMONICS ORDER

	(-dBm)	(-dBc)										
0	-	-	6	15	23	35	36	33	38	47	33	58
1	-	49	+0	38	17	46	29	53	44	44	61	53
2	48	40	53	54	50	50	59	64	59	58	75	60
3	82	65	59	61	51	58	58	71	59	67	68	69
4	>90	>87	79	73	74	75	72	77	76	81	84	>87
5	>90	>87	>87	>87	>87	>87	81	79	79	86	85	>87
6	>90	>87	>87	>87	>87	>87	>87	>87	>87	>87	>87	>87
7	>90	>87	>87	>87	>87	>87	>87	>87	>87	>87	>87	>87
8	>90	>87	>87	>87	>87	>87	>87	>87	>87	>87	>87	>87
9	>90	>87	>87	>87	>87	>87	>87	>87	>87	>87	>87	>87
10	>90	>87	>87	>87	>87	>87	>87	>87	>87	>87	>87	>87
RF CAL	0	1	2	3	4	5	6	7	8	9	10	

Test conditions:

RF IN: 2140 MHz; 5.00 dBm.
LO IN: 1870 MHz; +16.00 dBm
IF OUT: 270 MHz; -2.77 dBm

RF HARMONICS ORDER

	(-dBm)	(-dBc)										
0	-	-	16	22	34	45	44	49	52	59	51	57
1	-	42	+0	34	19	41	35	52	62	47	67	61
2	28	29	42	48	43	45	46	64	54	52	61	54
3	53	45	40	47	32	45	38	68	46	70	64	68
4	71	79	63	56	56	58	58	53	60	73	68	67
5	>90	77	70	62	59	58	50	52	56	62	62	66
6	>90	84	82	81	75	74	69	67	82	64	70	71
7	>90	95	81	91	73	73	65	62	62	58	67	65
8	>90	87	85	>97	96	81	97	81	76	94	72	88
9	>90	>97	>97	>97	93	84	86	81	73	76	73	69
10	>90	94	>97	90	88	>97	85	86	94	94	78	84
RF CAL	0	1	2	3	4	5	6	7	8	9	10	

LO HARMONICS ORDER

Test conditions:

RF IN: 2140 MHz; 15.00 dBm.
LO IN: 1870 MHz; +16.00 dBm
IF OUT: 270 MHz; 7.02 dBm

- Notes: 1. All Harmonics are in (dBc) relative to IF OUTPUT.
2. + entry denotes harmonics are in (dBc) above IF OUTPUT.
3. RF Cal represent the Harmonics level of the RF input signal to the mixer.